

Claims

- Sub A
1. A process for preparing a hydrophobic starch, comprising etherification, esterification or amidation of a root or tuber starch comprising at least 95 wt.% of amylopectin, based on dry substance of the starch, or a derivative thereof, with a hydrophobic reagent comprising an alkyl chain having from 4-24 carbon atoms.
  2. A process according to claim 1, wherein the starch comprises at least 98 wt.% of amylopectin, based on dry substance of starch.
  3. A process according to any of the preceding claims, wherein the starch is amylopectin potato starch or amylopectin tapioca starch.
  4. A process according to any of the preceding claims, wherein the derivative of the starch is obtained by hydroxyalkylation, carboxymethylation, cationization, partially degradation, oxidation, or a combination thereof.
  5. A process according to any of the preceding claims, comprising etherification using a hydrophobic reagent comprising a halide, halohydrin, epoxide, glycidyl, carboxylic acid or quaternary ammonium group.
  6. A process according to any of the preceding claims, comprising esterification using a hydrophobic reagent comprising an anhydride group.
  7. A process according to any of the preceding claims, comprising amidation of a carboxymethylated starch using a hydrophobic reagent comprising an amine group.
  8. A process according to any of the preceding claims, wherein the etherification, esterification or amidation is carried out in the presence of a surfactant.
  9. A hydrophobic starch obtainable in a process according to any of the preceding claims.
  10. A reversible gel comprising a hydrophobic starch according to claim 9 dispersed in water.

